Work Order ID 88615

August-02-12 1:46:17 PM

88615

Item ID: D3479-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Tube

Start Date: 7/27/12 **Start Qty:** 1.00 *1*

Required Date: 7/27/12 **Req'd Qty:** 1.00 *1*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MLJ **Date:** 12/08/09 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

SCRAP

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3479	Rev B								
100		0.00							
100	SHEAR					1	0		JM 12-16-19
Shear	**Memo**	0.00							
Shear	Cut Flat pattern 2.50" X 8.50" as per Dwg D3479								
304 .018									
110		0.00							
110	Small Fab				DAS 30 9-89				14(a.b3
Small Fab	**Memo**	0.00							
Small Fab	1-Deburr2-Roll part as per Dwg D34793-Spot weld as per Dwg D3479 and Dart QSI 0184-Fabricate Bead using Rotary Machine as per Dwg D3479 5-Form as per dwg D3479								
120	QC11- Inspect spot weld per QSI004	0.00							
120									
QC	**Memo**	0.00							
Quality Control									

Scrap will be outsourced from now on as of 14.01.23

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric to O/S
☐ Cracks
☐ Crushed/Crimped
☐ Cuffs
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Ripples in Bend
☐ Torque Waves in Extrusion
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damaged
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drill Holes
☐ Drawing
☐ Finish
☐ Folio

☐ Grain
☐ Hardware
☐ Inspection Incomplete
☐ Instructions Incomplete/Unclear
☐ Maintenance
☐ Mislabeled
☐ Misread
☐ Offset
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions

☐ Ovalized
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other _____

Item ID: D3479-1 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Tube
Start Date: 7/27/12 **Start Qty:** 1.00 *1* **Cust Item ID:**
Required Date: 7/27/12 **Req'd Qty:** 1.00 *1* **Customer:**
Reference:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC5- Inspect part completeness to step on W/O	0.00							
130									
QC	**Memo**	0.00							
Quality Control									
140	Identify as per dwg & Stock Location:_____	0.00							
140									
Packaging	**Memo**	0.00							
Packaging									
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	**Memo**	0.00							
Quality Control									

4.01.23

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric to O/S
☐ Cracks
☐ Crushed/Crimped
☐ Cuffs
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Ripples in Bend
☐ Torque Waves in Extrusion
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damaged
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drill Holes
☐ Drawing
☐ Finish
☐ Folio
☐ Grain
☐ Hardware
☐ Inspection Incomplete
☐ Instructions Incomplete/Unclear
☐ Maintenance
☐ Mislabeled
☐ Misread
☐ Offset
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Ovalized
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

_____
_____
_____

Picklist Print

August-02-12 1:46:16 PM

Work Order ID: 88615
Parent Item: D3479-1
Parent Item Name: Tube
Start Date: 7/27/12 **Required Date:** 7/27/12
Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP Rev:A New Issue 06-02-02 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S26GA 304/316 0.018 SHEET		Purchased	No			100	sf	71.8500	**0.14**	**0.14**			

JM 12-10-19

Location	Loc Qty	Loc Code
MAT020	71.85	
117798	71.85	

122753 122753

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped.
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

_____

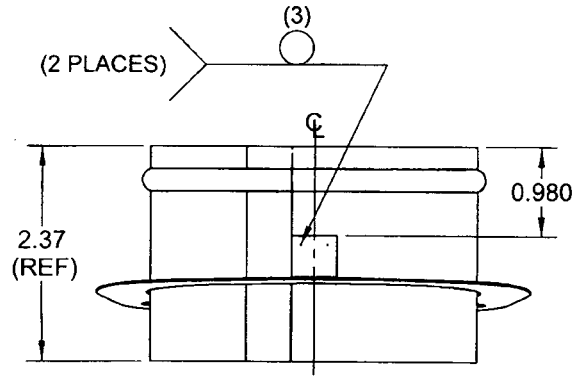
_____

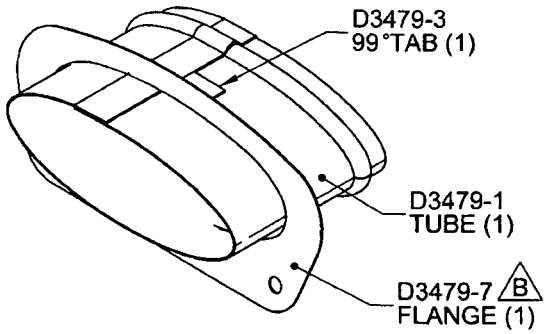
DART

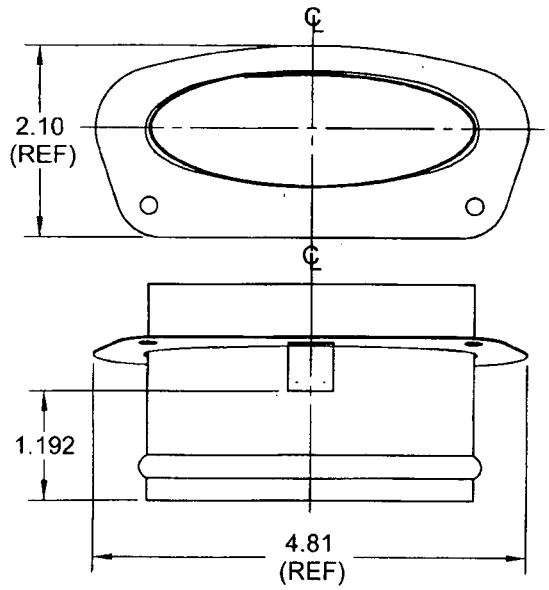
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED PH	APPROVED PH	DRAWING NO. D3479	REV. B SHEET 1 OF 4
DATE 08.12.19		TITLE INLET ADAPTER	SCALE 1:2

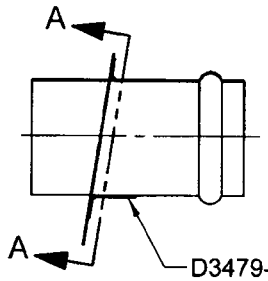
A	06.01.19	NEW ISSUE
B	08.12.19	CORRECT TYPO ON SHT1; ADD TOL ON SHT2; MATL SPEC WAS MIL-S-5019

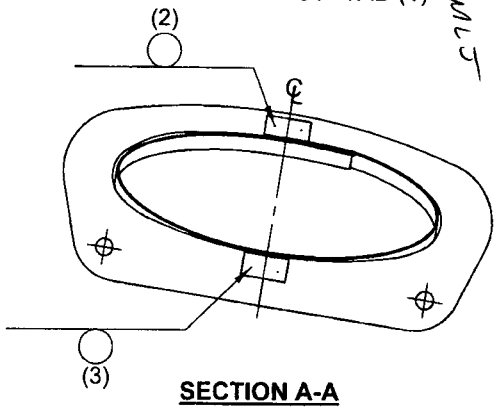
RELEASED
2019/08/30 MF











SHOP COPY
RETURN TO ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT WITHOUT NOTICE
WORK ORDER NO 12/08/09 8826 MLT

D3479-041 INLET ADAPTER

SECTION A-A

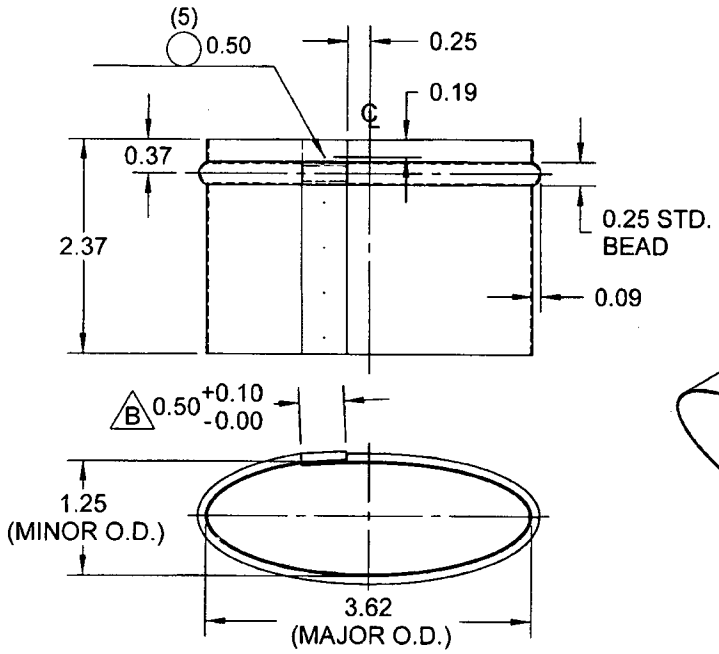
NOTES:

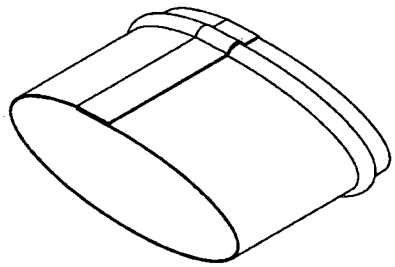
1) SPOT WELD PER DART QSI 018
2) FINISH: NONE
3) IDENTIFY WITH DART P/N D3479-041 USING FINE POINT PERMANENT INK MARKER
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES
6) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3479-041	INLET ADAPTER
1	D3479-1	TUBE
1	D3479-3	99 DEGREE TAB
1	D3479-5	81 DEGREE TAB
1	D3479-7	FLANGE

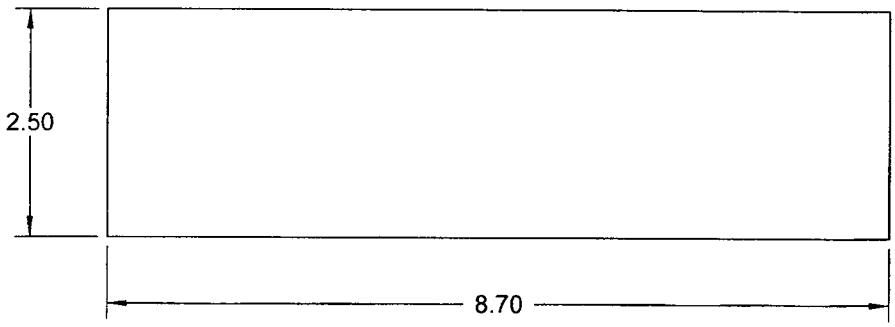
DESIGN	DRAWN BY	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3479	REV. B SHEET 2 OF 4
DATE 08.12.19		TITLE INLET ADAPTER	SCALE 1:2

RELEASED 09/01/20





D3479-1 TUBE



x1

D3479-1F FLAT PATTERN

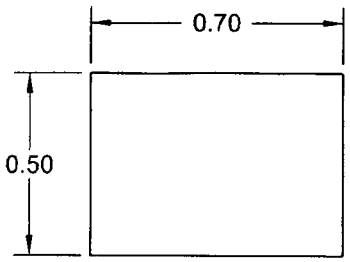
NOTES:

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5059 (ANNEALED) 2B FINISH (B)
   OR AMS 5513/5524, 26 GAUGE SS (0.018 THICK)
   (REF. DART SPEC. M304S26GA)
2) SPOT WELD PER DART QSI 018
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

8615

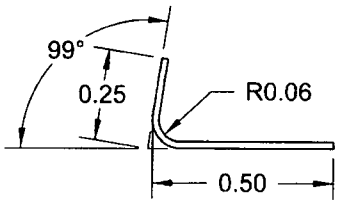
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED RG	APPROVED	DRAWING NO. D3479	REV. B SHEET 3 OF 4
DATE 08.12.19		TITLE ADAPTER INLET	SCALE 2:1

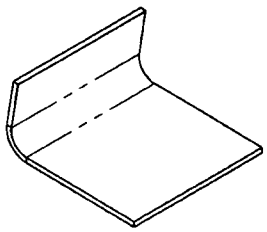
RELEASED
19/01/30 MP



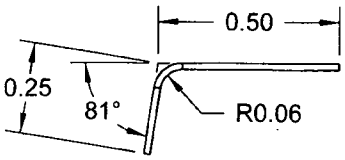
D3479-3F FLAT PATTERN

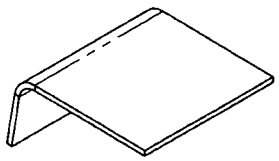
1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5059 (ANNEALED) 2B FINISH (B)
OR AMS 5513/5524, 26 GAUGE SS (0.018 THICK)
(REF. DART SPEC. M304S26GA)





D3479-3 99 DEGREE TAB
(MAKE FROM D3479-3F FLAT PATTERN)





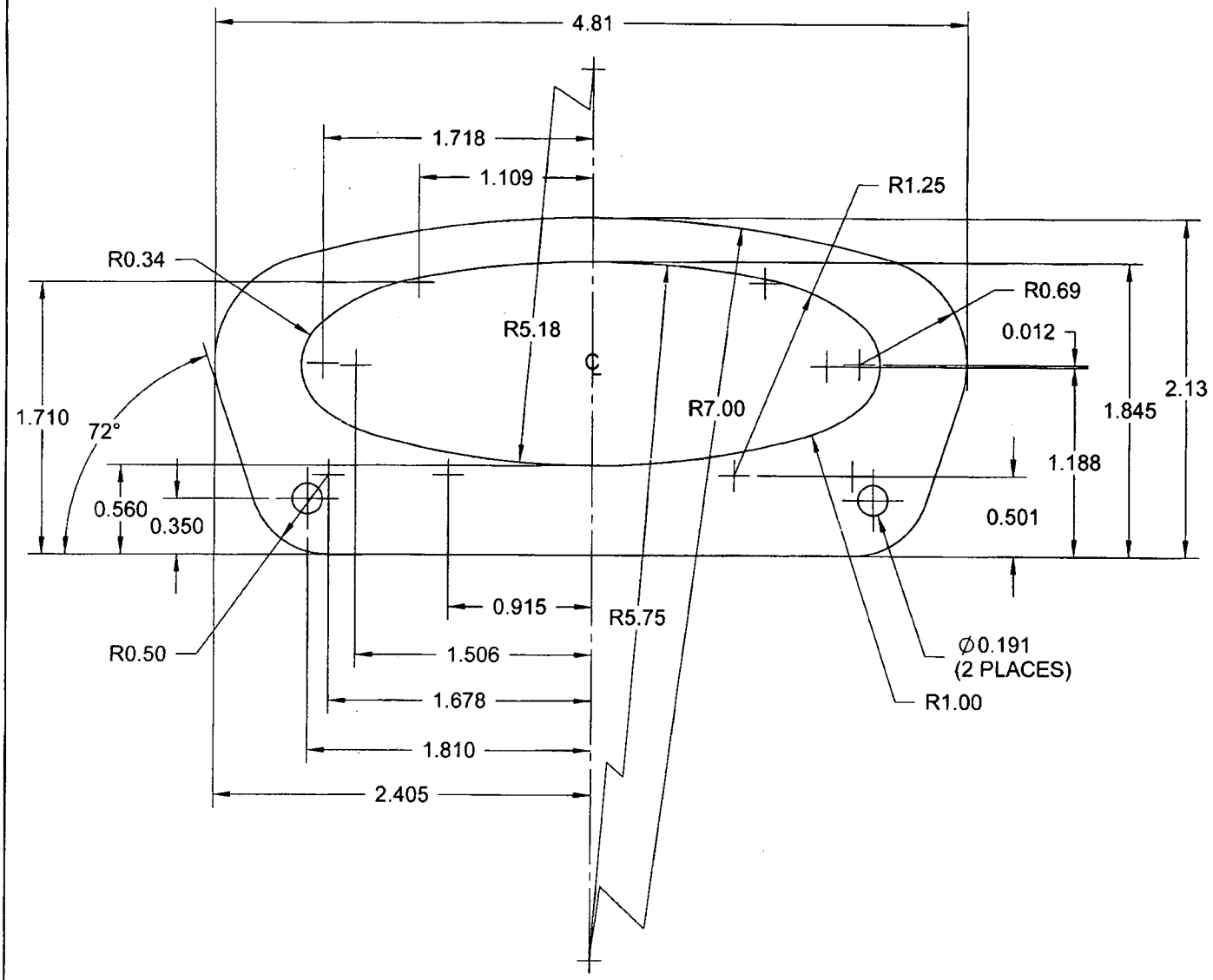
D3479-5 81 DEGREE TAB
(MAKE FROM D3479-3F FLAT PATTERN)

NOTES:

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
3) ALL DIMENSIONS ARE IN INCHES
4) BREAK ALL SHARP EDGES 0.005 TO 0.010

DESIGN	DRAWN BY	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3479 REV. B SHEET 4 OF 4
DATE 08.12.19		TITLE ADAPTER INLET SCALE 1:1

RELEASED 21/01/30 MP



D3479-7 FLANGE PLATE

NOTES:

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5059 (ANNEALED) 2B FINISH (B)
   OR AMS 5513/5524, 26 GAUGE SS (0.018 THICK)
   (REF. DART SPEC. M304S26GA)
2) PART IS SYMMETRICAL ABOUT CENTERLINE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

8861S